

REMARKS

Claims 1-3, 6-20 and 23-38 are pending. By this Response, claims 1, 18 and 36-38 are amended. Claims 4-5, 21 and 22 have been cancelled without prejudice or disclaimer. Reconsideration and allowance based on the above-amendments and following remarks are respectfully requested.

Brief Summary of Embodiments of the Invention

In embodiments of the present invention a control means is designed to control either a transmission stream composite means, a stream composite means, and a stream storing means in accordance with a communication destination date and time, or a feature of a received stream composite means, a stream receiving means, and a second stream storage means in accordance with one of a communication source in a communication date and time. The control means performs a specific function in relation to the various recited features based upon specific communication destination date and time for the video and audio signal.

In embodiments of the present invention the stream composite means is part of the video encoding/transmitting device and also the receiving stream composite means is part of the video receiving/decoding device. The devices therefore include all necessary elements to operate as a video transmission

and/or receiving device without relying on separate devices to perform the functions of the stream composite and receiving stream composite means.

Other embodiments of the invention encode the complete video and/or audio data captured, thus obtaining the natural scene. Parts of the video data and/or audio data can then be combined with objects previously encoded. This allows for the data to be manipulated, for example, if a user does not want a particular person receiving the video data to see the natural background that the user may be standing against. The complete encoded natural data can also be shown without modification if the person receiving the data is allowed to by the transmitting user to view the entire data. Thus, the embodiments of the present invention provided great flexibility in how different people receiving the video data view the captured video data.

Prior Art Rejections

The Office Action rejects claims 1-7, 10, 16, 18-24, 27, 34 and 36-38 under 35 U.S.C. §103(a) as being unpatentable over Maeda, et al. (US 6,546,052) in view of Murakami, et al. (US 5,507,940); claims 8-9, 11-13, 17, 25-26, 28-31 and 35 under 35 U.S.C. §103(a) as being unpatentable over Maeda, Murakami and Hibino, et al. (JP 06165173A) and claims 14-15 and 32-33 under 35 U.S.C. §103(a) as being unpatentable over Maeda, Murakami and Agraharam (US 6,414,707). These rejections are respectfully traversed.

Maeda teaches a moving image transmission system that senses a moving image, extracts the image and encodes the extracted image. The encoded image is transmitted to a moving image editor which corrects pixel values of the image. The corrected image is then encoded again and transmitted to a communication network. Also, the main image is extracted along with a blue background portion. Thus, Maeda teaches separating image data prior to encoding and does not teach encoding completely the natural scene captured by the video. See at least column 7, lines 42-56.

In Maeda the moving image editor 2112 which contains the image synthesizer 2217 or device for combining images, is not part of the transmitting device. See Fig. 14. Further, Maeda does not teach a device for receiving a stream composite means that is included within the video receiving device itself. Moreover, as recited in claim 36 two stream composite means are recited. Maeda, at best, teaches the use of only one device for combining images.

Murakami teaches an image signal transmitting and receiving system in which the faced image information and background image information are extracted. A three-dimensional polygon model is adjusted to the extracted face. The background and face model are then encoded and transmitted to a receiver. At the receiver, the face and background are decoded and combined. See column 3, lines 30-50, column 5, lines 2-15 and column 6, lines 7-19.

Murakami teaches separating image data prior to encoding and the complete video signal of the natural scene is not encoded. Moreover, the fake image background taught in Murakami is not transmitted beforehand for use in combining with the natural scene, if necessary.

Further, Hibino and Agraharam fail to make up Maeda and Murakami's deficiencies. Hibino and Agraharam fail to teach the use of a stream composite means as recited in independent claims 1, 18, and 36-38.

Thus, Maeda alone or in combination with any one or more of Murakami, Hibino or Agraharam fail to teach or suggest:

a video encoding/transmitting device for motion picture comprising: a medium encoding means for object-encoding a complete video signal of a natural scene supplied from outside; a transmission stream composite means for combining a part or all of objects encoded by the medium encoding means, with an object which is different from object of the video signal supplied from outside and object-encoded in advance; and a stream transmitting means for transmitting video data combined by the transmission stream composite means, as recited in claim 1;

a video receiving/decoding device for motion picture, comprising: a stream receiving means for receiving object-encoded complete video data; a received-stream composite means for combining a part or all of objects in the video data received by the stream receiving means, with an object which is object-encoded in

advance; and a medium decoding means for decoding the video data combined by the received-stream composite means, as recited in claim 18;

a video transmitting/receiving device for motion picture, comprising: a transmission processing unit having: a medium encoding means for object-encoding either or both of a complete video signal of a natural scene and an audio signal supplied from the outside; a transmission stream composite means for combining a part or all of objects encoded by the medium encoding means, with an object which is object-encoded in advance; and a stream transmitting means for transmitting either or both of video data and audio data combined by the transmission stream composite means; and a reception processing unit having: a stream receiving means for receiving either or both of complete video data and the audio data which are object-encoded; a received-stream composite means for combining an object in either or both of the video data and the audio data received by the stream receiving means, with an object which is object-encoded in advance; and a medium decoding means for decoding either or both of the video data and the audio data combined by the received-stream composite means., as recited in claim 36;

a video transmission system for motion picture, comprising: a video encoding/transmitting device having: a medium encoding means for object-encoding either or both of a complete video signal of a natural scene and an audio signal supplied from the outside; a transmission stream composite means for

combining a part or all of objects encoded by the medium encoding means, with an object which is object-encoded in advance; and a stream transmitting means for transmitting either or both of video data and audio data combined by the transmission stream composite means; and a receiving device for receiving and decoding either or both of complete video data and the audio data from the video encoding/transmitting device, as recited in claim 37; and

a video transmission system for motion picture, comprising: a transmission device for object-encoding either or both of a complete video signal of a natural scene and an audio signal supplied from the outside, and transmitting a part of objects in either or both of the object-encoded video data and audio data; and a video receiving/decoding device having: a stream receiving means for receiving either or both of the object-encoded complete video data and audio data transmitted from the transmission device; a received-stream composite means for combining an object in either or both of the video data and the audio data received by the stream receiving means, with an object which is object-encoded in advance; and a medium decoding means for decoding either or both of the video data and the audio data combined by the received-stream composite means, as recited in claim 38.

Further, regarding dependent claims 14, 15, 32 and 33, the Office Action has applied Agraharam to teach the claimed control means. Applicant respectfully submits that Agraharam teaches an apparatus for conducting

video conferencing. Prior to engaging in the video conferencing, a user can select a desired background for conducting the video conferencing. This selection is then sent to the user for confirmation prior to the video conference itself. Once the user confirms the desired background, the video conferencing continues as normal. See column 4 through column 5, lines 1-20.

The office Action alleges that the retrieval of background information by a user in Agraharam is the same as applicant's claimed control means.

Applicant respectfully submits that Agraharam's system merely teaches a user performing a selection, it does not teach or suggest a control means that is capable of controlling various features. Simply stated, the various features and the combinations of controlling by the control means based upon a specific communication destination and date and time are not taught by a combination of Maeda, Murakami and Agraharam. Thus, this combination fails to teach all the claim limitations as required.

Motivation

Applicant respectfully submits that one of ordinary skill would not be motivated to combine the teachings of Maeda, Murakami and Agraharam.

Each of the above references teach a unique system. Although each of the references teach systems that concern video imaging and transmission or reception, they are each confined to a specific environment. For example,

Maeda teaches a system that extracts moving objects from a uniform background such as a blue screen. The images are encoded and transmitted to a correction device, decoded, corrected, encoded again and sent to a network. Murakami, however, provides a face extraction system that produces a wire frame structure for the face and transmits the wire frame structure and a background to a receiver where they are combined. Finally, Agraharam teaches a video conferencing system in which a user selects a background for use during the video conference. Live video is transmitted during the transmission of data and processed normally.

One of ordinary skill would not look to the video and imaging aspects of these three unique systems in order to combine their teachings to provide the claimed invention. For example, one would not look to a video conferencing system from which a user can select a particular background and combine this teaching with a system that extracts face data and creates a wire frame structure for the face or a system that extracts moving images from a uniform background. Moreover, motivation is not provided within the references themselves to combine such teachings with their systems.

Conclusion

In view of the above, applicants respectfully submit that a proper rejection under 35 U.S.C. §103 has not been established. A combination of

references fail to teach each and every feature of the claimed limitations and motivation is lacking for combining the teachings of the cited references. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

For at least these reasons, it is respectfully submitted that claims 1, 3-5, 8, 9, 11-13, 16-18, 20-23, 25, 26, 28-31 and 34-38 are distinguishable over the cited art. Favorable consideration and prompt allowance are earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Chad J. Billings (Reg. No. 48,917) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Appl. No. 09/890,435

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment(s)